

Mr. David Holston
National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211

Re: 073-11626
First Administrative Amendment to
FESOP F073-9983-00033

Dear Mr. Holston:

National Gypsum Company was issued a permit on December 4, 1998 for a stationary gypsum wallboard related product manufacturing operation. A letter was received on November 9, 1999 requesting a revision of descriptive information pursuant to 326 IAC 2-8-10(a)(6) where the revision will not trigger a new applicable requirement or violate a permit term. Pursuant to 326 IAC 2-8-10(a)(5), additional changes have been made to monitoring, maintenance, or record keeping requirements that are not environmentally significant. Pursuant to the provisions of 326 IAC 2-8-10 the permit is hereby administratively amended as follows:

- (1) The emission units and pollution control equipment description for the two ready-mix joint compound and dry powder production lines in Section A.2(b)(1) and (2) on pages 5 and 6 of 39 are revised to accurately reflect the process information included in the FESOP application submitted on July 23, 1998. This modification qualified as an Administrative Amendment pursuant to 326 IAC 2-8-10(a)(14) because the new units are identical to the existing units in function and mode of operation and are subject to the same regulatory requirements as the existing units. The maximum production rate is not increasing as a result of these changes, and each unit is equipped with a bin vent baghouse. The remaining description has been renumbered.
- (b) ~~Two (2) ready-mix joint compound and dry powder product lines, consisting of the following equipment:~~ **One (1) Ready-Mix (Liquid) Product Line, with a maximum throughput of 15 tons per hour, consisting of the following equipment:**
 - (1) ~~one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM1), exhausting inside the building, and identified as PL1, PL2, and PL3, respectively,~~ **Two (2) silo weigh receiving bins (ID Nos. PL1 and PL2) with a maximum throughput of 15 tons per hour, controlled by two baghouses (ID Nos. RM1 and RM2);**
 - (2) ~~one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM2), exhausting inside the building, and identified as PL4, PL5, and PL6, respectively.~~ **Two dry additive/short weigh receiving bins (ID Nos. PL3 and PL4) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM3 and RM4); and**

- (3) Two mixers/limestone scale hoppers (ID Nos. PL5 and PL6) with a maximum throughput of 3,000 gallons per hour, controlled by two baghouses (ID Nos. RM5 and RM6).
- (c) One (1) Dry Powder Product Line, with a maximum throughput of 15 tons per hour, consisting of the following equipment:
 - (1) Two (2) silo weigh receiving bins (ID Nos. PL9 and PL10), with a maximum throughput of 15 tons per hour, controlled by two baghouses (ID Nos. RM9 and RM10);
 - (2) Two dry additive/short weigh receiving bins (ID Nos. PL11 and PL12) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM11 and RM12); and
 - (3) Two mixers/surge bins (ID Nos. PL13 and PL14) with a maximum throughput of 12 tons per hour, controlled by a baghouse (ID No. RM13).
- (1) The Insignificant Activities in Section A.3 on page 6 of 39 are revised to include the following emission units at an exemption level:
 - (e) Other activities or categories not previously identified: with emissions equal to or less than thresholds:
 - (1) Two bulk bag dumping stations (ID Nos. PL7 and PL8) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM7 and RM8).
 - (2) One bag cleaner (ID No. PL 15) with a maximum throughput of 12 tons per hour, controlled by a baghouse (ID No. RM 14); and
 - (3) One (1) bulk bag dumping station (ID No. PL16) with a maximum throughput of 10 tons per hour, controlled by one baghouse (ID No. RM15).

- (2) The emission units and pollution control equipment description for the two ready-mix joint compound and dry powder production lines in Section D.3 on page 32 of 39 are revised to accurately reflect the process information included in the FESOP application submitted on July 23, 1998.

Facility Description [326 IAC 2-8-4(10)]

- (b) ~~Two (2) ready-mix joint compound and dry powder product lines, consisting of the following equipment: One (1) Ready-Mix (Liquid) Product Line, with a maximum throughput of 15 tons per hour, consisting of the following equipment:~~
- ~~(1) one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM1), exhausting inside the building, and identified as PL1, PL2, and PL3, respectively, and Two (2) silo weigh receiving bins (ID Nos. PL1 and PL2) with a maximum throughput of 15 tons per hour, controlled by two baghouses (ID Nos. RM1 and RM2);~~
 - ~~(2) one (1) dry additive bin, one (1) receiving bin, and one (1) mixer, each with a maximum throughput of 17 tons per hour, controlled by a baghouse (ID SV RM2), exhausting inside the building, and identified as PL4, PL5, and PL6, respectively. Two dry additive/short weigh receiving bins (ID Nos. PL3 and PL4) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM3 and RM4);~~
 - ~~(3) Two mixers/limestone scale hoppers (ID Nos. PL5 and PL6) with a maximum throughput of 3,000 gallons per hour, controlled by two baghouses (ID Nos. RM5 and RM6).~~
- (c) One (1) Dry Powder Product Line, with a maximum throughput of 15 tons per hour, consisting of the following equipment:
- (1) Two (2) silo weigh receiving bins (ID Nos. PL9 and PL10) with a maximum throughput of 15 tons per hour, controlled by two baghouses (ID Nos. RM9 and RM10);
 - (2) Two dry additive/short weigh receiving bins (ID Nos. PL11 and PL12) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM11 and RM12); and
 - (3) Two mixers/surge bins (ID Nos. PL13 and PL14) with a maximum throughput of 12 tons per hour, controlled by a baghouse (ID No. RM13).

- (3) The discussion of 326 IAC 6-3-2 on page 32 of 39 of the permit has been revised to include each facilities correct process weight rate. There has been no increase in emissions as a result of this change, as the maximum capacity of the facilities has been reduced, and when operating with the baghouses as particulate control the facilities are in compliance with 326 IAC 6-3-2.

D.3.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from **the one (1) ready-mix joint compound and the one (1) joint tape process line** ~~each of the two (2) dry additive bins (ID PL1 and PL4), two (2) receiving bins (ID PL2 and PL5), and two (2) mixers (ID PL3 and PL6), using baghouses (ID RM1 and RM2) as control, shall be limited by the following not exceed 27.36 pounds per hour when each operating at a process weight rate of 34,000 pounds per hour (equivalent to 17 tons per hour),~~

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The allowable emissions for each facility are as follows:

Emission Unit	Process Weight Rate (tons/hr)	Allowable PM Emissions Per Unit (326 IAC 6-3-2) (lb/hr)
Two (2) silo weigh receiving bins (ID Nos. PL1 and PL2)	15.00	25.16
Two dry additive/short weigh receiving bins (ID Nos. PL3 and PL4)	10.00	19.18
Two (2) silo weigh receiving bins (ID Nos. PL9 and PL10)	15.00	25.16
Two dry additive/short weigh receiving bins (ID Nos. PL11 and PL12)	10.00	19.18
Two mixers/surge bins (ID Nos. PL13 and PL14)	12.00	21.67

- (4) Conditions D.2.3, D.3.3, and D.4.3 have been added to the permit to ensure that the sourcewide

PM-10 emissions are limited to less than 100 tons per year. Short term limits are required for these federally enforceable limits. The remaining conditions have been renumbered, and the changes to the permit are as follows:

D.2.2 Particulate Matter less than 10 Microns [326 IAC 2-8][326 IAC 2-2]

Pursuant to 326 IAC 2-8 (FESOP) and 326 IAC 2-2 (Prevention of Significant Deterioration), the baghouses controlling the seven (7) storage silos (ID SV1 thru SV7) shall be in operation at all times and the PM10 emissions from the seven (7) storage silos (ID SV1 thru SV7) shall not exceed 2.26 pounds per hour. This emission limit is necessary to limit the total source wide PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.

D.3.3 Particulate Matter less than 10 Microns [326 IAC 2-8][326 IAC 2-2]

Pursuant to 326 IAC 2-8 (FESOP) and 326 IAC 2-2 (Prevention of Significant Deterioration), the baghouses controlling the one (1) ready-mix joint compound and the one (1) joint tape process line shall be in operation at all times and the PM10 emissions from the one (1) ready-mix joint compound and the one (1) joint tape process line shall not exceed 20.27 pounds per hour. This emission limit is necessary to limit the total source wide PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.

D.4.2 Particulate Matter less than 10 Microns [326 IAC 2-8][326 IAC 2-2]

Pursuant to 326 IAC 2-8 (FESOP) and 326 IAC 2-2 (Prevention of Significant Deterioration), the baghouse controlling the one (1) Joint Tape Process line (ID SV8) shall be in operation at all times and the PM10 emissions from the one (1) Joint Tape Process line (ID SV8) shall not exceed 0.07 pounds per hour. This emission limit is necessary to limit the total source wide PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.

- (4) The baghouse listed Section D.4 shall always vent the exhaust gas inside the building, utilizes a control device, and has allowable emissions less than 10 pounds per hour for the controlled pollutant. Therefore, it is not necessary to conduct compliance monitoring. Conditions D.4.4 through D.4.8 are revised or removed as follows:

D.4.46 Particulate Matter (PM)

The baghouse for PM control shall be in operation **and venting to the inside of the building** at all times when the one (1) joint tape process line is in operation.

~~Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~

~~D.4.5 Parametric Monitoring~~

~~The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the one (1) joint tape process line, at least once weekly when the one (1) joint tape process line is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.~~

~~The instrument used for determining the pressure shall comply with Section C - Pressure Gauge~~

~~Specifications of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.~~

~~D.4.6 Broken or Failed Bag Detection~~

~~In the event that bag failure has been observed:~~

- ~~(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~
- ~~(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~

~~D.4.7 Visible Emissions Notations~~

- ~~(a) Daily visible emission notations of the one (1) joint tape process line shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.~~
- ~~(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~
- ~~(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.~~
- ~~(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~
- ~~(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

~~D.4.8 Record Keeping Requirements~~

- ~~(a) To document compliance with Conditions D.4.1 and D.4.7, the Permittee shall maintain records of daily visible emission notations of the one (1) joint tape process line exhaust.~~
- ~~(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~
- ~~(c) To document compliance with Condition D.4.4, the Permittee shall maintain the following:~~

- (1) ~~Daily records of the following operational parameters during normal operation when venting to the atmosphere:~~
 - (A) ~~Inlet and outlet differential static pressure; and~~
 - (B) ~~Cleaning cycle: frequency and differential pressure.~~
- (2) ~~Documentation of all response steps implemented, per event.~~
- (3) ~~Operation and preventive maintenance logs, including work purchases orders, shall be maintained.~~
- (4) ~~Quality Assurance/Quality Control (QA/QC) procedures.~~
- (5) ~~Operator standard operating procedures (SOP).~~
- (6) ~~Manufacturer's specifications or its equivalent.~~
- (7) ~~Equipment "troubleshooting" contingency plan.~~
- (8) ~~Documentation of the dates vents are redirected.~~
- (d) ~~All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Phillip Ritz, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for extension (3-6878), or dial (973) 575-2555, extension 3241.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
PR/EVP

cc: File - Jasper County
U.S. EPA, Region V
Jasper County Health Department
Air Compliance Section Inspector Eric Courtright
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michelle Boner

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
and ENHANCED NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT**

**National Gypsum Company
East Maple St., Lot 8 - Lintner Industrial Park
Rensselaer, Indiana 47978**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 and 326 IAC 2-1-3.2, as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F073-9983-00033	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 4, 1998

First Administrative Amendment: 073-11626	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-8-3(b)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]
- A.4 FESOP Applicability [326 IAC 2-8-2]
- A.5 Prior Permit Conditions

SECTION B GENERAL CONDITIONS

- B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]
- B.2 Definitions [326 IAC 2-8-1]
- B.3 Permit Term [326 IAC 2-8-4(2)]
- B.4 Enforceability [326 IAC 2-8-6]
- B.5 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)]
- B.6 Severability [326 IAC 2-8-4(4)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]
- B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]
- B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
- B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)]
- B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
- B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]
- B.14 Emergency Provisions [326 IAC 2-8-12]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
- B.17 Permit Renewal [326 IAC 2-8-3(h)]
- B.18 Administrative Permit Amendment or Modification [326 IAC 2-8-10][326 IAC 2-8-11]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)]
- B.20 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]
- B.21 Operational Flexibility [326 IAC 2-8-15]
- B.22 Construction Permit Requirement [326 IAC 2]
- B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)]
- B.24 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-8-10]
- B.25 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]
- B.26 Enhanced New Source Review [326 IAC 2]

SECTION C SOURCE OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- C.1 Overall Source Limit [326 IAC 2-8]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1][IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
- C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]
- C.8 Stack Height [326 IAC 1-7]
- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

Testing Requirements [326 IAC 2-8-4(3)]

- C.10 Performance Testing [326 IAC 3-6]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.12 Maintenance of Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]
- C.13 Monitoring Methods [326 IAC 3]
- C.14 Pressure Gauge Specifications

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]
- C.17 Compliance Monitoring Plan - Failure to Take Corrective Action [326 IAC 2-8-4]
- C.18 Actions Related to Noncompliance Demonstrated by a Stack Test

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- C.19 Monitoring Data Availability
- C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

Stratospheric Ozone Protection

- C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY CONDITIONS

Stationary gypsum wallboard related product manufacturing operation

General Construction Conditions

Effective Date of the Permit

First Time Operation Permit

SECTION D.2 FACILITY CONDITIONS

One (1) ready-mix joint compound and dry powder product storage facility

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.2.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.2.2 Particulate Matter less than 10 Microns [326 IAC 2-8][326 IAC 2-2]
- D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.2.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]
- D.2.5 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.2.6 Parametric Monitoring
- D.2.7 Broken Bag or Failure Detection
- D.2.8 Visible Emissions Notations

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

- D.2.9 Record Keeping Requirements

SECTION D.3 FACILITY CONDITIONS

Two (2) ready-mix joint compound and dry powder product line

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.3.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]
- D.3.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.3.3 Particulate Matter less than 10 Microns [326 IAC 2-8][326 IAC 2-2]
- D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.3.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]
- D.3.6 Particulate Matter (PM)

SECTION D.4 FACILITY CONDITIONS

One (1) Joint Tape Process line

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.4.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.4.2 Particulate Matter less than 10 Microns [326 IAC 2-8][326 IAC 2-2]
- D.4.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.4.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]
- D.4.5 Particulate Matter (PM)

Certification Form

Emergency/Deviation Form

Semi-Annual Compliance Monitoring Report Form

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary gypsum wallboard related product manufacturing operation.

Responsible Official: G. P. Carroll
Source Address: East Maple St., Lot 8 - Lintner Industrial Park, Rensselaer, Indiana 47978
Mailing Address: 2001 Rexford Road, Charlotte, NC 28211
SIC Code: 3275
County Location: Jasper
County Status: Attainment for all criteria pollutants
Source Status: Federally Enforceable State Operating Permit (FESOP)
Minor Source, under PSD

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) ready-mix joint compound and dry powder product storage facility with a total maximum throughput of 124 tons of raw material per hour, and consisting of the following equipment:
 - (1) Seven (7) storage silos, each separately controlled by a baghouse, utilizing pneumatic loading, and consisting of the following:
 - (A) two (2) limestone silos, each with a maximum throughput of 27 tons of limestone per hour, each with a storage capacity of 33,000 cubic feet, and identified as SV1 and SV2,
 - (B) one (1) plaster of paris silo with a maximum throughput of 20 tons of plaster of paris per hour, with a storage capacity of 8,200 cubic feet, and identified as SV3,
 - (C) one (1) talc silo with a maximum throughput of 14 tons of talc per hour, with a storage capacity of 8,200 cubic feet, and identified as SV4,
 - (D) one (1) clay silo with a maximum throughput of 24 tons of clay per hour, with a storage capacity of 8,200 cubic feet, and identified as SV5,
 - (E) one (1) mica silo with a maximum throughput of 6 tons of mica per hour, with a storage capacity of 8,200 cubic feet, and identified as SV6, and
 - (F) one (1) perlite silo with a maximum throughput of 6 tons of perlite per hour, with a storage capacity of 8,200 cubic feet, and identified as SV7.
- (b) One (1) Ready-Mix (Liquid) Product Line, with a maximum throughput of 15 tons per hour, consisting of the following equipment:
 - (1) Two (2) silo weigh receiving bins (ID Nos. PL1 and PL2) with a maximum throughput of 15 tons per hour, controlled by two baghouses (ID Nos. RM1 and RM2);

- (2) Two dry additive/short weigh receiving bins (ID Nos. PL3 and PL4) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM3 and RM4); and
- (3) Two mixers/limestone scale hoppers (ID Nos. PL5 and PL6) with a maximum throughput of 3,000 gallons per hour, controlled by two baghouses (ID Nos. RM5 and RM6).
- (c) One (1) Dry Powder Product Line, with a maximum throughput of 15 tons per hour, consisting of the following equipment:
 - (1) Two (2) silo weigh receiving bins (ID Nos. PL9 and PL10), with a maximum throughput of 15 tons per hour, controlled by two baghouses (ID Nos. RM9 and RM10);
 - (2) Two dry additive/short weigh receiving bins (ID Nos. PL11 and PL12) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM11 and RM12); and
 - (3) Two mixers/surge bins (ID Nos. PL13 and PL14) with a maximum throughput of 12 tons per hour, controlled by a baghouse (ID No. RM13).
- (d) One (1) Joint Tape Process line consisting of one (1) buffer, one (1) slit, and one (1) rewinder, each with a maximum capacity of 2000 pounds of joint tape per hour, using the Joint Tape Baghouse (SV8) as control.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour,
- (b) Closed loop heating and cooling systems,
- (c) Paved and unpaved roads and parking lots with public access, and
- (d) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separator, tanks, and fluid handling equipment.
- (e) Other activities or categories not previously identified: with emissions equal to or less than thresholds:
 - (1) Two bulk bag dumping stations (ID Nos. PL7 and PL8) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM7 and RM8).
 - (2) One bag cleaner (ID No. PL 15) with a maximum throughput of 12 tons per hour, controlled by a baghouse (ID No. RM 14); and
 - (3) One (1) bulk bag dumping station (ID No. PL16) with a maximum throughput of 10 tons per hour, controlled by one baghouse (ID No. RM15).

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

- (a) One (1) ready-mix joint compound and dry powder product storage facility with a total maximum throughput of 124 tons of raw material per hour and consisting of the following equipment:
- (1) Seven (7) storage silos, each separately controlled by a baghouse, utilizing pneumatic loading and consisting of the following:
- (A) two (2) limestone silos, each with a maximum throughput of 27 tons of limestone per hour, each with a storage capacity of 33,000 cubic feet, and identified as SV1 and SV2,
 - (B) one (1) plaster of paris silo with a maximum throughput of 20 tons of plaster of paris per hour, with a storage capacity of 8,200 cubic feet, and identified as SV3,
 - (C) one (1) talc silo with a maximum throughput of 14 tons of talc per hour, with a storage capacity of 8,200 cubic feet, and identified as SV4,
 - (D) one (1) clay silo with a maximum throughput of 24 tons of clay per hour, with a storage capacity of 8,200 cubic feet, and identified as SV5,
 - (E) one (1) mica silo with a maximum throughput of 6 tons of mica per hour, with a storage capacity of 8,200 cubic feet, and identified as SV6, and
 - (F) one (1) perlite silo with a maximum throughput of 6 tons of perlite per hour, with a storage capacity of 8,200 cubic feet, and identified as SV7.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the:

- (a) Two (2) limestone silos (ID SV1 and SV2) shall each not exceed 37.31 pounds per hour when each operating at a process weight rate of 54,000 pounds per hour (equivalent to 27 tons per hour).
- (b) One (1) plaster of paris silo (ID SV3) shall not exceed 30.51 pounds per hour when operating at a process weight rate of 40,000 pounds per hour (equivalent to 20 tons per hour).
- (c) One (1) talc silo (ID SV4) shall not exceed 24.03 pounds per hour when operating at a process weight rate of 28,000 pounds per hour (equivalent to 14 tons per hour).
- (d) One (1) clay silo (ID SV5) shall not exceed 34.48 pounds per hour when operating at a process weight rate of 48,000 pounds per hour (equivalent to 24 tons per hour).
- (e) One (1) mica silo (ID SV6) shall not exceed 13.62 pounds per hour when operating at a process weight rate of 12,000 pounds per hour (equivalent to 6 tons per hour).
- (f) One (1) perlite silo (ID SV7) shall not exceed 13.62 pounds per hour when operating at a process weight rate of 12,000 pounds per hour (equivalent to 6 tons per hour).

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000

pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.2.2 Particulate Matter less than 10 Microns [326 IAC 2-8][326 IAC 2-2]

Pursuant to 326 IAC 2-8 (FESOP) and 326 IAC 2-2 (Prevention of Significant Deterioration), the baghouses controlling the seven (7) storage silos (ID SV1 thru SV7) shall be in operation at all times and the PM10 emissions from the seven (7) storage silos (ID SV1 thru SV7) shall not exceed 2.26 pounds per hour. This emission limit is necessary to limit the total source wide PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.

D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) ready-mix joint compound and dry powder product storage facility and its control devices.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.5 Particulate Matter (PM)

The baghouses for PM control shall be in operation at all times when the one (1) ready-mix joint compound and dry powder product storage facility is loading and unloading.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the one (1) ready-mix joint compound and dry powder product storage facility, at least once weekly when the one (1) ready-mix joint compound and dry powder product storage facility is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.2.7 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.2.8 Visible Emissions Notations

- (a) Daily visible emission notations of the one (1) ready-mix joint compound and dry powder product storage facility exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1 and D.2.8, the Permittee shall maintain records of daily visible emission notations of the one (1) ready-mix joint compound and dry powder product storage facility exhaust.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.
- (c) To document compliance with Condition D.2.5, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

- (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle: frequency and differential pressure.
- (2) Documentation of all response steps implemented, per event .
- (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures.
- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

- (b) One (1) Ready-Mix (Liquid) Product Line, with a maximum throughput of 15 tons per hour, consisting of the following equipment:
- (1) Two (2) silo weigh receiving bins (ID Nos. PL1 and PL2) with a maximum throughput of 15 tons per hour, controlled by two baghouses (ID Nos. RM1 and RM2);
 - (2) Two dry additive/short weigh receiving bins (ID Nos. PL3 and PL4) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM3 and RM4);
 - (3) Two mixers/limestone scale hoppers (ID Nos. PL5 and PL6) with a maximum throughput of 3,000 gallons per hour, controlled by two baghouses (ID Nos. RM5 and RM6); and
 - (4) Two bulk bag dumping stations (ID Nos. PL7 and PL8) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM7 and RM8).
- (c) One (1) Dry Powder Product Line, with a maximum throughput of 15 tons per hour, consisting of the following equipment:
- (1) Two (2) silo weigh receiving bins (ID Nos. PL9 and PL10) with a maximum throughput of 15 tons per hour, controlled by two baghouses (ID Nos. RM9 and RM10);
 - (2) Two dry additive/short weigh receiving bins (ID Nos. PL11 and PL12) with a maximum throughput of 10 tons per hour, controlled by two baghouses (ID Nos. RM11 and RM12);
 - (3) Two mixers/surge bins (ID Nos. PL13 and PL14) with a maximum throughput of 12 tons per hour, controlled by a baghouse (ID No. RM13);
 - (4) One bag cleaner (ID No. PL 15) with a maximum throughput of 12 tons per hour, controlled by a baghouse (ID No. RM 14); and
 - (5) One (1) bulk bag dumping station (ID No. PL16) with a maximum throughput of 10 tons per hour, controlled by one baghouse (ID No. RM15).

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Any change or modification, for the two (2) ready-mix joint compound and dry powder product lines that would lead to an increase in source wide potential VOC emissions to 25 tons per year, shall obtain approval from the Office of Air Management (OAM), as required by 326 IAC 2-1 before such change can occur.

D.3.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the one (1) ready-mix joint compound and the one (1) joint tape process line shall be limited by the following,

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The allowable emissions for each facility are as follows:

Emission Unit	Process Weight Rate (tons/hr)	Allowable PM Emissions Per Unit (326 IAC 6-3-2) (lb/hr)
Two (2) silo weigh receiving bins (ID Nos. PL1 and PL2)	15.00	25.16
Two dry additive/short weigh receiving bins (ID Nos. PL3 and PL4)	10.00	19.18
Two bulk bag dumping stations (ID Nos. PL7 and PL8)	10.00	19.18
Two (2) silo weigh receiving bins (ID Nos. PL9 and PL10)	15.00	25.16
Two dry additive/short weigh receiving bins (ID Nos. PL11 and PL12)	10.00	19.18
Two mixers/surge bins (ID Nos. PL13 and PL14)	12.00	21.67
One bag cleaner (ID No. PL 15)	12.00	21.67
One (1) bulk bag dumping station (ID No. PL16)	10.00	19.18

D.3.3 Particulate Matter less than 10 Microns [326 IAC 2-8][326 IAC 2-2]

Pursuant to 326 IAC 2-8 (FESOP) and 326 IAC 2-2 (Prevention of Significant Deterioration), the baghouses controlling the one (1) ready-mix joint compound and the one (1) joint tape process line shall be in operation at all times and the PM10 emissions from the one (1) ready-mix joint compound and the one (1) joint tape process line shall not exceed 20.27 pounds per hour. This emission limit is necessary to limit the total source wide PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.

D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and their control devices.

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

Within 6 months after issuance of this permit, the Permittee shall perform VOC testing utilizing Method 25 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner to verify the VOC flash off percentage. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.3.6 Particulate Matter (PM)

The baghouses for PM control shall be in operation and venting to the inside of the building at all times when the two (2) ready-mix joint compound and dry powder product lines are in operation.

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]

- (c) One (1) Joint Tape Process line consisting of one (1) buffer, one (1) slitter, and one (1) rewinder, each with a maximum capacity of 2000 pounds of joint tape per hour, using the Joint Tape Baghouse (SV8) as control.

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the (1) buffer, one (1) slitter, and one (1) rewinder shall not exceed 4.1 pounds per hour when each operating at a process weight rate of 2000 pounds per hour (equivalent to 1 ton per hour),

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.4.2 Particulate Matter less than 10 Microns [326 IAC 2-8][326 IAC 2-2]

Pursuant to 326 IAC 2-8 (FESOP) and 326 IAC 2-2 (Prevention of Significant Deterioration), the baghouse controlling the one (1) Joint Tape Process line (ID SV8) shall be in operation at all times and the PM10 emissions from the one (1) Joint Tape Process line (ID SV8) shall not exceed 0.07 pounds per hour. This emission limit is necessary to limit the total source wide PM10 emissions to 8.25 tons per month. Compliance with this condition will render the requirements of 326 IAC 2-7 (Part 70 Permits), not applicable.

D.4.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) joint tape process line and its control devices.

Compliance Determination Requirements

D.4.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.4.5 Particulate Matter (PM)

The baghouse for PM control shall be in operation and venting to the inside of the building at all times when the one (1) joint tape process line is in operation.